Parameter	Units	n²	MEC <sup>3,4</sup>	Most Stringent Criteria	Background	RPA Endpoint <sup>5</sup>
Chromium (III), Total Recoverable	μg/L	1	3.4	190,000 <sup>11</sup>	0	3
Di-n-butyl phthalate	μg/L	1	<4.3	3,500 <sup>11</sup>	0	3
Dichlorobenzenes <sup>1</sup>	μg/L	1	<0.50	5,100 <sup>11</sup>	0	3
Diethyl phthalate	μg/L	1	<2.2	33,00011	0	3
Dimethyl phthalate	µg/L	1	<1.1	820,000 <sup>11</sup>	0	3
4,6-Dinitro-2-methylphenol	µg/L	1	<8.7	22011	0	3
2,4-Dinitrophenol	μg/L	1	<8.7	4.011	0	3
Ethylbenzene	μg/L	1	<0.25	4,100 <sup>11</sup>	0	3
Fluoranthene	µg/L	1	<0.87	15 <sup>11</sup>	0	3
Hexachlorocyclopentadiene	µg/L	11	<8.7	5811	0	3
Nitrobenzene	μg/L	1	<2.2	4.911	0	3
Thallium, Total Recoverable	μg/L	<del>  i</del>	<1.0	211	0	3
Toluene	μg/L	1	<0.25	85,000 <sup>11</sup>	0	3
Tributyltin	μg/L μg/L	1	<0.047	0.0014 <sup>11</sup>	0	3
1,1,1-Trichloroethane		1	<0.047	540,000 <sup>11</sup>	0	3
	μg/L	1		0.10 <sup>11</sup>		3
Acrylonitrile	µg/L		<1.0		0	
Aldrin	µg/L	1 1	<0.0016	0.00002211	0	3
Benzene	µg/L	1	<0.25	5.911	0	3
Benzidine	μg/L	1	<22	0.00006911	0	3
Beryllium, Total Recoverable	μg/L	1	<0.5	0.033 <sup>11</sup>	0	3
Bis(2-chloroethyl) ether	μg/L	1	<0.87	0.045 <sup>11</sup>	0	3
Bis(2-ethylhexyl) phthalate	μg/L	1	<8.7	3.5 <sup>11</sup>	0	3
Carbon tetrachloride	μg/L	1	<0.25	0.90 <sup>11</sup>	0	3
Chlordane <sup>1</sup>	µg/L	1	<0.087	0.00002311	0	3
Chlorodibromomethane	µg/L	1	3.6	8.6 <sup>11</sup>	0	3
Chloroform	µg/L	1	5.3	13011	0	3
Dichlorodiphenyltrichloroethane (DDT) <sup>1</sup>	μg/L	1	<0.078	0.00017 <sup>11</sup>	0	3
1,4-Dichlorobenzene	μg/L	1	<0.25	18 <sup>11</sup>	0	3
3,3-Dichlorobenzidine	μg/L	<del>   </del>	<8.7	0.008111	0	3
1,2-Dichloroethane	μg/L	<del>  i</del>	<0.25	2811	0	3
1,1-Dichloroethylene	μg/L	1	<0.25	0.911	0	3
Dichlorobromomethane		1	4.7	6.2 <sup>11</sup>	0	3
	µg/L			450 <sup>11</sup>		
Dichloromethane	μg/L	1	< 0.88		0	3
1,3-Dichloropropene	µg/L	1 1	<0.25	8.911	0	3
Dieldrin	μg/L	11	<0.0022	0.0000411	0	3
2,4-Dinitrotoluene	μg/L	1	<8.7	2.611	0	3
1,2-Diphenylhydrazine	μg/L	1	<2.2	0.16 <sup>11</sup>	0	3
Halomethanes 1	μg/L	1	<1.5	130 <sup>11</sup>	0	3
Heptachlor	μg/L	1	<0.0033	0.00005 <sup>11</sup>	0	3
Heptachlor Epoxide	µg/L	1	<0.0027	0.0000211	0	3
Hexachlorobenzene	μg/L	1	<2.2	0.0002111	0	3
Hexachlorobutadiene	μg/L	1	<0.25	14 <sup>11</sup>	0	3
Hexachloroethane	µg/L	1	<0.5	2.5 <sup>11</sup>	0	3
Isophorone	μg/L	1	<2.2	730 <sup>11</sup>	0	3
N-nitrosodimethylamine	μg/L	1	<4.3	7.3 <sup>11</sup>	0	3
N-nitrosodi-N-propylamine	μg/L	1	<4.3	0.3811	0	3
N-nitrosodiphenylamine	μg/L	1	<2.2	2.5 <sup>11</sup>	0	3
Polynuclear Aromatic						
Hydrocarbons (PAHs) <sup>1</sup>	μg/L	1	<36	0.008811	0	3
Polychlorinated Biphenyls (PCBs) <sup>1</sup>	μg/L	1	<1.9	0.00001911	0	3
Tetrachlorodibenzodioxin (TCDD)						
equivalents <sup>1</sup>	μg/L	1	<2.1E-06	0.00000003911	0	3
1,1,2,2-Tetrachoroethane	μg/L	1	<0.25	2.311	0	3
Tetrachloroethylene	μg/L	1	<0.25	2.011	0	3
Toxaphene	μg/L	1	<0.27	0.00021 <sup>11</sup>	0	3
Trichloroethylene	μg/L	1	<0.25	27 <sup>11</sup>	0	3
1,1,2-Trichloroethane	μg/L	1	<0.25	9.411	0	3

Parameter	Units	n²	MEC <sup>3,4</sup>	Most Stringent Criteria	Background	RPA Endpoint⁵
2,4,6-Trichlorophenol	μg/L	1	<2.2	0.2911	0	3
Vinyl Chloride	μg/L	1	<0.25	36 <sup>11</sup>	0	3

- See Attachment A for definitions of abbreviations and a glossary of common terms used in this Order.
- Number of data points available for the RPA.
- 3. If there is a detected value, the highest reported value is summarized in the table. If there are no detected values, the lowest method detection limit (MDL) is summarized in the table.
- 4. Note that the reported maximum effluent concentration (MEC) does not account for dilution. The RPA does account for dilution; therefore, it is possible for a parameter with an MEC in exceedance of the most stringent criteria not to present a RP (i.e. Endpoint 2).
- 5. End Point 1 RP determined, limitation required, monitoring required.
  - End Point 2 Discharger determined not to have RP, monitoring may be established.
  - End Point 3 RPA was inconclusive, carry over previous limitations if applicable, and establish monitoring.
- 6. Based on the 6-Month Median in the Table 1 of the Ocean Plan.
- 7. Background concentrations contained in Table 3 of the Ocean Plan.
- Order Nos. R9-2005-0139 and R9-2012-0006 did not include effluent limitations or monitoring requirements for acute toxicity.
- 9. Based on the Daily Maximum in Table 1 of the Ocean Plan.
- Not to exceed limits specified in title 17, division 1, chapter 5, subchapter 4, group 3, article 3, section 30253 of the CCR. Levels of radioactivity that exceed the applicable criteria are not expected in the discharge.
- 11. Based on the 30-day average in the Table 1 of the Ocean Plan.

Reasonable potential to cause or contribute to an exceedance of water quality objectives contained within the Ocean Plan (i.e., Endpoint 1) was not determined for any parameters outlined in Table F-7. Based on the limited available data, the RPA was inconclusive for all parameters. Since reasonable potential to exceed water quality objectives contained in Table 1 of the Ocean Plan could not be determined and Order No. R9-2012-0006 did not assign effluent limitations for any of these parameters, this Order does not contain WQBELs for individual metals or other priority pollutants listed in Table 1 of the Ocean Plan. Instead, performance goals for these parameters have been calculated or retained from Order No. R9-2012-0006.

The MRP (Attachment E) of this Order is designed to obtain additional information for these parameters to determine if reasonable potential exists for these parameters in future permit renewals and/or updates.

## 4. WQBEL Calculations

a. From the Table 1 water quality objectives of the Ocean Plan, performance goals are calculated according to the following equation for all pollutants, except for acute toxicity (if applicable) and radioactivity (if applicable):

$$Ce = Co + Dm (Co - Cs)$$
 where,

Ce = the effluent limitation (microgram per liter,  $\mu$ g/L)

Co = the water quality objective to be met at the completion of initial dilution (microgram,  $\mu g/L$ )

Cs = background seawater concentration

Dm = minimum probable initial dilution expressed as parts seawater per part

 As discussed in section IV.C.3 above, the Dm has been determined to be 237:1 by the San Diego Water Board. c. Table 3 of the Ocean Plan establishes background concentrations for some pollutants to be used when determining reasonable potential (represented as "Cs"). In accordance with Table 1 implementing procedures, Cs equals zero for all pollutants not established in Table 3. The background concentrations provided in Table 3 of the Ocean Plan are summarized in Table F-8:

Table F-7. Pollutants Having Background Concentrations<sup>1</sup>

Pollutant	Background Seawater Concentration
Arsenic, Total Recoverable	3 μg/L
Copper, Total Recoverable	2 μg/L
Mercury, Total Recoverable	0.0005 μg/L
Silver, Total Recoverable	0.16 µg/L
Zinc, Total Recoverable	8 μg/L

See Attachment A for definitions of abbreviations and a glossary of common terms used in this Order.

d. As an example of how performance goals have been calculated, performance goals for cyanide are determined as follows:

Water quality objectives from the Ocean Plan for cyanide are:

Table F-8. Example Parameter Water Quality Objectives<sup>1</sup>

Parameter	Units	6-Month Median	Maximum Daily	Instantaneous Maximum
Cyanide, Total	μg/L	1	4	10

See Attachment A for definitions of abbreviations and a glossary of common terms used in this Order.

Using the equation, Ce = Co + Dm (Co - Cs), performance goals are calculated as follows.

# Cyanide:

Ce = 1 + 237 (1 - 0) = 238 (6-Month Median) Ce = 4 + 237 (4 - 0) = 952 (Daily Maximum) Ce = 10 + 237 (10 - 0) = 2,380 (Instantaneous Maximum)

Based on the implementing procedures described above, performance goals have been calculated for all parameters in Table 1 of the Ocean Plan and incorporated into this Order.

e. Section 122.45(f)(1) of the 40 CFR requires effluent limitations be expressed in terms of mass, with some exceptions, and 40 CFR section 122.45(f)(2) allows pollutants that are limited in terms of mass to additionally be limited in terms of other units of measurement. However, section III.C.4.j of the Ocean Plan requires that mass limitations be established for all parameters in Table 1 of the Ocean Plan. This Order includes effluent limitations expressed in terms of mass and concentration. In addition, pursuant to the exceptions to mass limitations provided in 40 CFR section 122.45(f)(1), some effluent limitations are not expressed in terms of mass, such as pH and temperature, and when the applicable standards are expressed in terms of concentration (e.g., CTR criteria and MCLs) and mass limitations are not necessary to protect the beneficial uses of the receiving water.

Mass-based effluent limitations were calculated using the following equation:  $lbs/day = permitted flow (MGD) \times pollutant concentration (mg/L) \times 8.34$ 

f. A summary of the performance goals is provided in Table F-10.

Table F-9. Performance Goals for Discharge Point No. 001 (Monitoring Location EFF-001)<sup>1</sup>

		Performance Goals <sup>2,3</sup>				
Parameter	Unit	6-Month Median	Average Monthly	Maximum Daily	Instantaneous Maximum	
OBJECTI	VES FOR PROTEC	TION OF MA	ARINE AQUA	TIC LIFE		
A	μg/L	1.19E+03		6.91E+03	1.83E+04	
Arsenic, Total Recoverable	lbs/day	9.95E-01		5.76E+00	1.53E+01	
Cadmium, Total Recoverable	μg/L	2.38E+02		9.52E+02	2.38E+03	
	lbs/day	1.98E-01	***	7.94E-01	1.98E+00	
Olemanairma MA	μg/L	4.76E+02		1.90E+03	4.76E+03	
Chromium VI <sup>4</sup>	lbs/day	3.97E-01		1.59E+00	3.97E+00	
Copper, Total Recoverable	μg/L	2.40E+02		2.38E+03	6.67E+03	
	lbs/day	2.00E-01		1.99E+00	5.56E+00	
Lead, Total Recoverable	μg/L	4.76E+02		1.90E+03	4.76E+03	
	lbs/day	3.97E-01		1.59E+00	3.97E+00	
Mercury, Total Recoverable	μg/L	9.40E+00		3.80E+01	9.51E+01	
	lbs/day	7.84E-03		3.17E-02	7.93E-02	
Nickel, Total Recoverable	μg/L	1.19E+03		4.76E+03	1.19E+04	
	lbs/day	9.92E-01		3.97E+00	9.92E+00	
	μg/L	3.57E+03		1.43E+04	3.57E+04	
Selenium, Total Recoverable	lbs/day	2.98E+00		1.19E+01	2.98E+01	
03	μg/L	1.29E+02		6.28E+02	1.63E+03	
Silver, Total Recoverable	lbs/day	1.07E-01		5.24E-01	1.36E+00	
Zin - Tatal Danasanahla	µg/L	2.86E+03	œœ	1.71E+04	4.57E+04	
Zinc, Total Recoverable	lbs/day	2.39E+00		1.43E+01	3.81E+01	
Overside, Tabel	μg/L	2.38E+02		9.52E+02	2.38E+03	
Cyanide, Total	lbs/day	1.98E-01		7.94E-01	1.98E+00	
Tatal Oblasina Danidual	μg/L	4.76E+02		1.90E+03	1.43E+04	
Total Chlorine Residual	lbs/day	3.97E-01		1.59E+00	1.19E+01	
Ammonia	μg/L	1.43E+05		5.71E+05	1.43E+06	
(expressed as nitrogen)	lbs/day	1.19E+02		4.76E+02	1.19E+03	
Chronic Toxicity <sup>5</sup>	"Pass"/"Fail"			"Pass"		
Phenolic Compounds	μg/L	7.14E+03		2.86E+04	7.14E+04	
(non-chlorinated) <sup>1</sup>	lbs/day	5.95E+00		2.38E+01	5.95E+01	
Chlorinated Dhan-li1	μg/L	2.38E+02		9.52E+02	2.38E+03	
Chlorinated Phenolics <sup>1</sup>	lbs/day	1.98E-01		7.94E-01	1.98E+00	
Endeaulfon1	μg/L	2.14E+00		4.28E+00	6.43E+00	
Endosulfan <sup>1</sup>	lbs/day	1.79E-03		3.57E-03	5.36E-03	

		Performance Goals <sup>2,3</sup>				
Parameter	Unit	6-Month Median	Average Monthly	Maximum Daily	Instantaneous Maximum	
Co deia	μg/L	4.76E-01		9.52E-01	1.43E+00	
Endrin	lbs/day	3.97E-04		7.94E-04	1.19E-03	
HOLL (DUO)1	μg/L	9.52E-01		1.90E+00	2.86E+00	
HCH (BHC) <sup>1</sup>	lbs/day	7.94E-04		1.59E-03	2.38E-03	
Radioactivity	pCi/L	5, subcha CCR, Refe future cha	apter 4, group erence to section anges to any ir law, as the	3, article 3, section 30253 is pros ncorporated provi changes take ef		
OBJECTIVES FOR P	ROTECTION C	F HUMAN HI	EALTH - NON	ICARCINOGEN	S	
Acrolein	μg/L	-	5.24E+04	-		
, (or or o	lbs/day		4.37E+01			
Antimony, Total Recoverable	μg/L		2.86E+05			
	lbs/day		2.38E+02			
Bis(2-chloroethoxy) Methane	μg/L		1.05E+03			
Bis(2-chloroethoxy) Methane	lbs/day		8.73E-01			
Bis(2-chloroisopropyl) Ether	μg/L		2.86E+05			
	lbs/day		2.38E+02			
Chlarahan	μg/L		1.36E+05			
Chlorobenzene	lbs/day		1.13E+02			
Chromium (III), Total Recoverable <sup>4</sup>	µg/L		4.52E+07			
Chromium (m), Total Recoverable	lbs/day		3.77E+04			
Din hutul Dhthalata	µg/L		8.33E+05			
Di-n-butyl Phthalate	lbs/day		6.95E+02			
Dishlambana 1	μg/L		1.21E+06			
Dichlorobenzenes <sup>1</sup>	lbs/day		1.01E+03			
Diathy d Dhah alaka	μg/L		7.85E+06			
Diethyl Phthalate	lbs/day		6.55E+03			
B: # 1819 1.1	µg/L		1.95E+08			
Dimethyl Phthalate	lbs/day		1.63E+05			
	µg/L		5.24E+04			
4,6-dinitro-2-methylphenol	lbs/day		4.37E+01			
	μg/L		9.52E+02			
2,4-dinitrophenol	lbs/day		7.94E-01			
	µg/L		9.76E+05			
Ethylbenzene	lbs/day		8.14E+02			
	μg/L		3.57E+03			
Fluoranthene	lbs/day		2.98E+00			

Ibs/day     1.98E-02             Ibs/day     5.24E-03           Ibs/day     4.37E-06         Ibs/day     1.40E+03         Ibs/day     1.40E+03         Ibs/day     1.17E+00         Ibs/day     1.64E-02         Ibs/day     1.64E-02         Ibs/day     1.37E-05         Ibs/day     7.85E+00         Ibs/day     6.55E-03         Ibs/day     1.07E+01         Ibs/day     8.93E-03         Ibs/day     8.93E-03         Ibs/day     8.33E+02         Ibs/day     6.95E-01         Ibs/day     2.14E+02         Ibs/day     1.79E-01         Ibs/day     1.79E-01         Ibs/day     1.79E-01         Ibs/day     1.71E+00         Chlorodibromomethane   Ibs/day     1.71E+00         Chloroform   Ibs/day     1.71E+00         Ibs/day     2.58E+01			Performance Goals <sup>2,3</sup>				
Nitrobenzene   Ibs/day   -   1.15E+01   -   -	Parameter	Unit					
Ibs/day	I lava alala na avalan anta di ana	μg/L		1.38E+04			
Distributy   Dis	Hexachiorocyclopentadiene	lbs/day		1.15E+01			
Ibs/day	N listana la compania	μg/L		1.17E+03			
Thallium, Total Recoverable   Ibs/day   - 3.97E-01     -   -	Nitropenzene	lbs/day		9.73E-01			
Ibs/day	The Higgs Total Deceyarable	μg/L		4.76E+02			
Tributyltin   Dis/day     1.69E+04	mailium, Total Recoverable	lbs/day		3.97E-01			
Ibs/day     1.69E+04	Taluana	μg/L		2.02E+07			
TributyItin         Ibs/day         —         2.78E-04         —         —           1,1,1-trichloroethane         μg/L         —         1.29E+08         —         —           OBJECTIVES FOR PROTECTION OF HUMAN HEALTH — CARCINOGENS           Acrylonitrile         μg/L         —         2.38E+01         —         —           Aldrin         μg/L         —         5.24E-03         —         —           Aldrin         μg/L         —         5.24E-03         —         —           Aldrin         μg/L         —         5.24E-03         —         —           Benzene         μg/L         —         1.40E+03         —         —           Benzidine         μg/L         —         1.64E-02         —         —           Benzidine         μg/L         —         1.64E-02         —         —           Beryllium, Total Recoverable         μg/L         —         7.85E+00         —         —           Bis(2-chloroethyl) Ether         lbs/day         —         6.56E-03         —         —           Bis(2-chloroethyl) Phthalate         lbs/day         — <td< td=""><td>roluerie</td><td>lbs/day</td><td></td><td>1.69E+04</td><td><b>20 20</b></td><td></td></td<>	roluerie	lbs/day		1.69E+04	<b>20 20</b>		
	Taileretaile	μg/L		3.33E-01			
1,1-trichloroethane   Ibs/day   -   1.07E+05   -   -   -	Indutyitin	lbs/day		2.78E-04			
Ibs/day     1.07E+05	1 1 1 triablaraathar	μg/L		1.29E+08			
Acrylonitrile         μg/L         -         2.38E+01         - <td>r, r, r-trichloroethane</td> <td>lbs/day</td> <td></td> <td>1.07E+05</td> <td></td> <td></td>	r, r, r-trichloroethane	lbs/day		1.07E+05			
Acrylonitrile         Ibs/day          1.98E-02             Aldrin         μg/L          5.24E-03             Benzene         μg/L          1.40E+03             Benzene         lbs/day          1.17E+00             Benzidine         lbs/day          1.64E-02             Benzidine         lbs/day          1.37E-05             Beryllium, Total Recoverable         lbs/day          6.55E-03             Bis(2-chloroethyl) Ether         lbs/day          8.93E-03             Bis(2-chloroethyl) Phthalate	OBJECTIVES FO	OR PROTECTION	OF HUMAN	HEALTH - CA	ARCINOGENS		
Ibs/day     1.98E-02             Ibs/day     5.24E-03           Ibs/day     4.37E-06         Ibs/day     1.40E+03         Ibs/day     1.40E+03         Ibs/day     1.17E+00         Ibs/day     1.64E-02         Ibs/day     1.64E-02         Ibs/day     1.37E-05         Ibs/day     7.85E+00         Ibs/day     6.55E-03         Ibs/day     1.07E+01         Ibs/day     8.93E-03         Ibs/day     8.93E-03         Ibs/day     8.33E+02         Ibs/day     6.95E-01         Ibs/day     2.14E+02         Ibs/day     1.79E-01         Ibs/day     1.79E-01         Ibs/day     1.79E-01         Ibs/day     1.71E+00         Chlorodibromomethane   Ibs/day     1.71E+00         Chloroform   Ibs/day     1.71E+00         Ibs/day     2.58E+01	Acrylonitrile	μg/L		2.38E+01		***	
Ibs/day				1.98E-02			
Ibs/day		μg/L		5.24E-03			
Benzene   Ibs/day     1.17E+00	Aldrin	lbs/day	·	4.37E-06			
Ibs/day		μg/L		1.40E+03			
Benzidine   Ibs/day	Benzene	lbs/day		1.17E+00			
Ibs/day	Daniel III.	μg/L		1.64E-02	an on		
Beryllium, Total Recoverable   Ibs/day   -     6.55E-03	Benzidine	lbs/day	on 000	1.37E-05	en eo		
Bis/day     6.55E-03	D 11: T 1 1 D	μg/L		7.85E+00			
Bis(2-chloroethyl) Ether   Ibs/day     8.93E-03           Bis(2-ethlyhexyl) Phthalate   μg/L     8.33E+02         Ibs/day     6.95E-01         Lbs/day     2.14E+02         Ibs/day     1.79E-01         Chlordane¹   μg/L     5.47E-03         Ibs/day     4.57E-06         Chlorodibromomethane   μg/L     2.05E+03         Chloroform   Lbs/day     1.71E+00         Ibs/day     2.58E+01         Dichlorodiphenyltrichloroethane   μg/L     4.05E-02	Beryllium, Total Recoverable	lbs/day		6.55E-03		-	
Ibs/day	Dis (O ablassathed) Ethan	μg/L		1.07E+01			
Bis(2-ethlyhexyl) Phthalate   Ibs/day	Bis(2-chloroethyl) Ether	lbs/day		8.93E-03		_	
Ibs/day     6.95E-01	Div (O add black at A) Didd at a table	μg/L		8.33E+02			
Carbon Tetrachloride           Ibs/day          1.79E-01             Chlordane¹         μg/L          5.47E-03             Ibs/day          4.57E-06             Chlorodibromomethane         μg/L          2.05E+03             Ibs/day          1.71E+00             Chloroform         μg/L          3.09E+04             Dichlorodiphenyltrichloroethane         μg/L          4.05E-02	Bis(2-ethiynexyi) Phthalate	lbs/day		6.95E-01			
Ibs/day	0.1. 7.1.11	μg/L		2.14E+02			
Chlordane¹         Ibs/day          4.57E-06             Chlorodibromomethane         μg/L          2.05E+03             Ibs/day          1.71E+00             Chloroform         μg/L          3.09E+04             Ibs/day          2.58E+01             Dichlorodiphenyltrichloroethane         μg/L          4.05E-02	Carbon Letrachionide	lbs/day		1.79E-01			
Ibs/day	01. 1. 1	μg/L		5.47E-03			
Chlorodibromomethane         Ibs/day          1.71E+00             Chloroform         μg/L          3.09E+04             Ibs/day          2.58E+01             Dichlorodiphenyltrichloroethane         μg/L          4.05E-02	Chiordane <sup>1</sup>	lbs/day		4.57E-06		_	
Ibs/day		μg/L		2.05E+03			
μg/L        3.09E+04           Ibs/day        2.58E+01           Dichlorodiphenyltrichloroethane       μg/L        4.05E-02	Chlorodibromomethane	lbs/day		1.71E+00			
Chloroform         Ibs/day          2.58E+01             Dichlorodiphenyltrichloroethane         μg/L          4.05E-02		µg/L	<del> </del>	3.09E+04			
Dichlorodiphenyltrichloroethane μg/L 4.05E-02	Chloroform		<del> </del>				
District Control of the Control of Control o	Dichlorodinhenyltrichloroethane						
	(DDT) <sup>1</sup>	lbs/day		3.37E-05			

		Performance Goals <sup>2,3</sup>				
Parameter	Unit	6-Month Median	Average Monthly	Maximum Daily	Instantaneous Maximum	
4.4. diablanahannan	µg/L		4.28E+03			
1,4-dichlorobenzene	lbs/day		3.57E+00			
0.01 diable as have idia a	µg/L		1.93E+00			
3,3'-dichlorobenzidine	lbs/day		1.61E-03			
4.0	µg/L		6.66E+03			
1,2-dichloroethane	lbs/day		5.56E+00			
4.4 diablamanthodana	µg/L		2.14E+02			
1,1-dichloroethylene	lbs/day		1.79E-01			
D: 11 1 11	µg/L		1.48E+03			
Dichlorobromomethane	lbs/day		1.23E+00			
Dichloromethane	µg/L		1.07E+05			
	lbs/day		8.93E+01			
1,3-dichloropropene	µg/L		2.12E+03			
	lbs/day		1.77E+00			
Dieldrin	µg/L		9.52E-03			
	lbs/day		7.94E-06			
2,4-dinitrotoluene	µg/L		6.19E+02			
	lbs/day		5.16E-01	***		
40.00	µg/L		3.81E+01			
1,2-diphenylhydrazine	lbs/day		3.18E-02			
11-11	µg/L		3.09E+04			
Halomethanes <sup>1</sup>	lbs/day		2.58E+01			
I I a make a la I a m	µg/L		1.19E-02			
Heptachlor	lbs/day		9.92E-06			
I I and a shift a Figure Side	µg/L		4.76E-03			
Heptachlor Epoxide	lbs/day		3.97E-06			
11	µg/L		5.00E-02			
Hexachlorobenzene	lbs/day		4.17E-05			
I love able value diama	μg/L		3.33E+03			
Hexachlorobutadiene	lbs/day		2.78E+00			
Lavashlarasthana	μg/L		5.95E+02			
Hexachloroethane	lbs/day		4.96E-01			
loophorono	μg/L		1.74E+05			
Isophorone	lbs/day		1.45E+02			
NI mitro o o dipo other de corio o	µg/L		1.74E+03		-	
N-nitrosodimethylamine	lbs/day		1.45E+00			
NI wither and NI was and a section -	µg/L		9.04E+01			
N-nitrosodi-N-propylamine	lbs/day		7.54E-02			

			Perfori	mance Goals <sup>2,3</sup>	
Parameter	Unit	6-Month Median	Average Monthly	Maximum Daily	Instantaneous Maximum
N-nitrosodiphenylamine	μg/L		5.95E+02		
	lbs/day		4.96E-01		
PAHs <sup>1</sup>	μg/L		2.09E+00		
PARS.	lbs/day		1.75E-03		
PCBs <sup>1</sup>	μg/L	NA 104	4.52E-03	***	
PCBS:	lbs/day		3.77E-06		
TCDD Equivalents <sup>1</sup>	μg/L		9.28E-07		
	lbs/day		7.74E-10		
440011	μg/L		5.47E+02		
1,1,2,2-tetrachloroethane	lbs/day		4.57E-01		
Tetrachloroethylene	μg/L		4.76E+02		
retrachioroethylene	lbs/day		3.97E-01		
Tayanhana	μg/L		5.00E-02		
Toxaphene	lbs/day		4.17E-05		
Tricklereethylene	μg/L		6.43E+03		
Trichloroethylene	lbs/day		5.36E+00		
4 4 2 triable reads and	μg/L		2.24E+03		
1,1,2-trichloroethane	lbs/day		1.87E+00		
2,4,6-trichlorophenol	μg/L		6.90E+01		
z,4,o-urchiorophenoi	lbs/day		5.76E-02		
Vinyl Chlorido	μg/L	- Mariana	8.57E+03	March .	
Vinyl Chloride	lbs/day		7.15E+00		

- See Attachment A for definitions of abbreviations and a glossary of common terms used in this Order.
- Scientific "E" notation is used to express certain values. In scientific "E" notation, the number following the "E" indicates that position of the decimal point in the value. Negative numbers after the "E" indicate that the value is less than 1, and positive numbers after the "E" indicate that the value is greater than 1. In this notation, a value of 6.1E-02 represents 6.1 x 10<sup>-2</sup> or 0.061, 6.1E+02 represents 6.1 x 10<sup>2</sup> or 610, and 6.1E+00 represents 6.1 x 10<sup>0</sup> or 6.1.
- The MER limitation, in lbs/day, was calculated based on the following equation: MER (lbs/day) = 8.34 x Q x C, where Q is the permitted flow for the Facility (0.10 MGD) and C is the concentration (mg/L).
- 4. The Discharger may, at their option, apply this performance goal as a total chromium performance goal.
- The Chronic Toxicity effluent limitation is protective of both the numeric acute and chronic toxicity 2015 Ocean Plan water quality objectives. The effluent limitation will be implemented using Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms (EPA/600/R-95/136, 1995), current USEPA guidance in the National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document (EPA 833-R-10-003, June 2010) (<a href="https://www3.epa.gov/npdes/pubs/wet\_final\_tst\_implementation2010.pdf">https://www3.epa.gov/npdes/pubs/wet\_final\_tst\_implementation2010.pdf</a>), and USEPA Regions 8, 9, and 10, Toxicity Training Tool (January 2010).

#### 5. Whole Effluent Toxicity (WET)

a. The WET testing protects receiving waters from the aggregate toxic effect of a mixture of pollutants in the effluent. Ocean Plan section III.C.4.c.(3) requires chronic

toxicity monitoring for ocean waste discharges with a minimum initial dilution from 100:1 to 350:1.

b. For chronic toxicity, Order No. R9-2012-0006 established a performance goal of 238 TUc and annual monitoring. During the term of Order No. R9-2012-0006, the maximum reported effluent chronic toxicity value was <100 TUc. Using the RPA procedures from the Ocean Plan, reasonable potential was inconclusive for chronic toxicity (i.e., Endpoint 3). Therefore, this Order does not require an effluent limitation for chronic toxicity. However, consistent with Order No. R9-2012-0006, this Order contains a performance goal. This Order increase monitoring for chronic toxicity from annually to semiannually to ensure a sufficient dataset for performing a more statistically-sound RPA for the reissuance of this Order.

For this Order, chronic toxicity in the discharge is evaluated using USEPA's 2010 Test of Significant Toxicity (TST) hypothesis testing approach at the discharge "instream" waste concentration (IWC), as described in section VII.K of this Order and section III.C of the MRP (Attachment E). The TST statistical approach is described in the *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document* (EPA 833-R-10-003, 2010), Appendix A, Figure A-1 and Table A-1. The TST null hypothesis shall be "mean discharge IWC response ≤ 0.75 × mean control response." A test that rejects this null hypothesis shall be reported as "Pass." A test that does not reject this null hypothesis shall be reported as "Fail." The chronic toxicity performance goal is expressed as "Pass" for each maximum daily individual result. The Discharger shall also report the "Percent Effect" as part of chronic toxicity result.

This Order contains a reopener to require the San Diego Water Board to modify the performance goal for toxicity, if necessary, to make it consistent with any new policy, law, or regulation.

- c. For acute toxicity, Order No. R9-2012-0006 did not establish any effluent limitations, performance goals, or monitoring requirements. An acute toxicity test is conducted over a short time period and measures mortality. A chronic toxicity test is conducted over a short or a longer period of time and may measure mortality, reproduction, and growth. A chemical at a low concentration could have chronic effects but no acute effects until the chemical is at a higher concentration. Thus, chronic toxicity is a more stringent requirement than acute toxicity. To ensure the aggregated impacts of pollutants present within the Discharger's effluent does not result in the presence of toxicity within the receiving water, this Order retains performance goals for chronic toxicity.
- d. Section III.F of the 2015 Ocean Plan provides for more stringent requirements if necessary to protect the designated beneficial uses of ocean waters. Diamond et al. (2013) examined the side-by-side comparison of no-observed-effect-concentration (NOEC) and TST results using California chronic toxicity test data (including data from POTWs) for the West Coast marine methods and test species required under this Order. See Table 1 (method types 1 through 5) on page 1103 in Diamond D., Denton D., Roberts J., Zheng L. 2013. *Evaluation of the Test of Significant Toxicity for Determining the Toxicity of Effluents and Ambient Water Samples*. Environ Toxicol Chem 32:1101-1108. This comparison shows that while the TST and NOEC statistical approaches perform similarly most of the time, the TST performs better in identifying toxic and nontoxic samples, a desirable characteristic for chronic toxicity testing conducted under this Order. This examination also signals that the test methods' false positive rate (β no higher than 0.05 at a mean effect of 10%) and

false negative rate ( $\alpha$  no higher than 0.05 (0.25 for topsmelt) at a mean effect of 25%) are indeed low. This highlights that using the TST in this Order - in conjunction with other Ocean Plan requirements (West Coast WET method/test species for monitoring and limiting chronic toxicity, the IWC representing the critical condition for water quality protection, the initial dilution procedure, and a single test for compliance)—provides increased assurance that statistical error rates are more directly addressed and accounted for in decisions regarding chronic toxicity in the discharge. As a result and in accordance with Ocean Plan section III.F, the San Diego Water Board is exercising its discretion to use the TST statistical approach for this discharge.

In June 2010, USEPA published a guidance document titled, *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document* (EPA 833-R-10-003, June 2010), in which they recommend the following: "Permitting authorities should consider adding the TST approach to their implementation procedures for analyzing valid WET data for their current NPDES WET Program." The TST approach is another statistical option for analyzing valid WET test data. Use of the TST approach does not result in any changes to USEPA's WET test methods. Section 9.4.1.2 of USEPA's *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms* (EPA/600/R-95/136, 1995), recognizes that, "the statistical methods in this manual are not the only possible methods of statistical analysis." The TST approach can be applied to acute (survival) and chronic (sublethal) endpoints and is appropriate to use for both freshwater and marine USEPA WET test methods.

The USEPA's WET testing program and acute and chronic WET methods rely on the measurement result for a specific test endpoint, not upon achievement of specified concentration-response patterns to determine toxicity. USEPA's WET methods do not require achievement of specified effluent or ambient concentrationresponse patterns prior to determining that toxicity is present. 6 Nevertheless, USEPA's acute and chronic WET methods require that effluent and ambient concentration-response patterns generated for multi-concentration acute and chronic toxicity tests be reviewed—as a component of test review following statistical analysis—to ensure that the calculated measurement result for the toxicity test is interpreted appropriately. (EPA-821-R-02-012, section 12.2.6.2; EPA-821-R-02-013, section 10.2.6.2). In 2000, USEPA provided guidance for such reviews to ensure that test endpoints for determining toxicity based on the statistical approaches utilized at the time the guidance was written, NOEC, percent waste giving 50 percent survival of test organisms (lethal concentration 50, LC 50), and effects concentration at 25 percent (EC25) were calculated appropriately (EPA 821-B-00-004)).

USEPA designed its 2000 guidance as a standardized step-by step review process that investigates the causes for ten commonly observed concentration-response patterns and provides for the proper interpretation of the test endpoints derived from these patterns for NOECs, LC 50, and EC25, thereby reducing the number of misclassified test results. The guidance provides one of three determinations based on the review steps: that calculated effect concentrations are reliable and should be reported, that calculated effect concentrations are anomalous and should be

See, Supplementary Information in support of the Final Rule establishing WET test methods at 67 Fed. Reg. 69952, 69963, Nov. 19, 2002.

explained, or that the test was inconclusive and should be repeated with a newly collected sample. The standardized review of the effluent and receiving water concentration-response patterns provided by USEPA's 2000 guidance decreased discrepancies in data interpretation for NOEC, LC 50, and EC25 test results, thereby lowering the chance that a truly nontoxic sample would be misclassified and reported as toxic.

Appropriate interpretation of the measurement result from USEPA's TST statistical approach ("Pass"/"Fail") for effluent and receiving water samples is, by design, independent from the concentration-response patterns of the toxicity tests for those samples. Therefore, when using the TST statistical approach, application of USEPA's 2000 guidance on effluent and receiving waters concentration-response patterns will not improve the appropriate interpretation of TST results as long as all Test Acceptability Criteria (TAC) and other test review procedures—including those related to quality assurance for effluent and receiving water toxicity tests, reference toxicity tests, and control performance (mean, standard deviation, and coefficient of variation)—described by the WET test methods manual and TST guidance, are followed. The 2000 guidance may be used to identify reliable, anomalous, or inconclusive concentration-response patterns and associated statistical results to the extent that the guidance recommends review of test procedures and laboratory performance already recommended in the WET test methods manual. The guidance does not apply to single-concentration (IWC) and control statistical t-tests and does not apply to the statistical assumptions on which the TST is based. The San Diego Water Board will not consider a concentration-response pattern as sufficient basis to determine that a TST t- test result for a toxicity test is anything other than valid. absent other evidence. In a toxicity laboratory, unexpected concentration-response patterns should not occur with any regular frequency and consistent reports of anomalous or inconclusive concentration-response patterns or test results that are not valid will require an investigation of laboratory practices.

Any Data Quality Objectives or Standard Operating Procedure used by the toxicity testing laboratory to identify and report valid, invalid, anomalous, or inconclusive effluent or receiving water toxicity test measurement results from the TST statistical approach which include a consideration of concentration-response patterns and/or Percent Minimum Significant Differences (PMSDs) must be submitted for review by the San Diego Water Board, in consultation with USEPA and the State Water Board's Quality Assurance Officer and Environmental Laboratory Accreditation Program (ELAP) (40 CFR section 122.44(h)). As described in the bioassay laboratory audit directives to the San Jose Creek Water Quality Laboratory from the State Water Board dated August 7, 2014, and from the USEPA dated December 24, 2013, the PMSD criteria only apply to compliance for NOEC and the sublethal endpoints of the NOEC, and therefore are not used to interpret TST results.

### D. Final Effluent Limitations Considerations

#### 1. Satisfaction of Anti-Backsliding Requirements

NPDES permits must conform with Anti-backsliding requirements discussed in section III.C.5 of this Fact Sheet. These Anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed. This permit complies with all applicable federal and State Anti-backsliding regulations. The effluent limitations in this Order are at least as stringent as the effluent limitations in Order No. R9-2012-0006.

## 2. Satisfaction of Antidegradation Policies

The WDRs for the Discharger must conform with antidegradation requirements discussed in section III.C.4 of this Fact Sheet. The antidegradation policies require that beneficial uses and the water quality necessary to maintain those beneficial uses in the receiving waters of the discharge shall be maintained and protected, and, if existing water quality is better than the quality required to maintain beneficial uses, the existing water quality shall be maintained and protected unless allowing a lowering of water quality is necessary to accommodate important economic and social development or consistent with maximum benefit to the people of California. When a significant lowering of water quality is allowed by the San Diego Water Board, an antidegradation analysis is required in accordance with the State Water Board's Administrative Procedures Update (July 2, 1990), Antidegradation Policy Implementation for NPDES Permitting.

This Order complies with the antidegradation provision of 40 CFR section 131.12 and State Water Board Resolution No. 68-16. The effluent limitations in this Order are at least as stringent as the effluent limitations in Order No. R9-2012-0006, and no degradation of the receiving water is expected.

## 3. Stringency of Requirements for Individual Pollutants

This Order contains TBELs for individual pollutants. The TBELs consist of restrictions on TSS, oil and grease, settleable solids, turbidity and pH. Restrictions on these pollutants are discussed in section IV.B of this Fact Sheet. This Order's technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements. These limitations are not more stringent than required by the CWA.

- E. Interim Effluent Limitations Not Applicable
- F. Land Discharge Specifications Not Applicable
- G. Recycling Specifications Not Applicable

## V. RATIONALE FOR RECEIVING WATER LIMITATIONS

Receiving water limitations of this Order are derived from the water quality objectives for ocean waters established by the Basin Plan and the Ocean Plan.

Prior to 2009, the San Diego Water Board interpreted the Bacterial Characteristics Water-contact Standards of the Ocean Plan to apply only in the zone bounded by the shoreline and a distance 1,000 feet from the shoreline or the 30-foot depth contour, whichever is further from the shoreline, and within kelp beds. The Ocean Plan provides that these Bacteriological Standards also apply in designated areas outside this zone used for water contact sports, as determined by the Regional Water Boards (i.e., all waters designated with the contact water recreation (REC-1) beneficial use). These designated areas must be specifically defined in the Basin Plan. Because the San Diego Water Board has designated the ocean waters with the REC-1 beneficial use in the Basin Plan, the Ocean Plan Bacterial Standards apply throughout State of California territorial marine waters in the San Diego Region, which extend from surface to bottom, out to three nautical miles from the shoreline. This interpretation has been confirmed by USEPA.

#### VI. RATIONALE FOR PROVISIONS

#### A. Standard Provisions

Standard Provisions, which apply to all NPDES permits in accordance with 40 CFR section 122.41, and additional conditions applicable to specified categories of permits in accordance with 40 CFR section 122.42, are provided in the Standard Provisions (Attachment D).

Sections 122.41(a)(1) and (b) through (n) of 40 CFR establish conditions that apply to all State-issued NPDES permits. These conditions must be incorporated into the permits either expressly or by reference. If incorporated by reference, a specific citation to the regulations must be included in the Order. Section 123.25(a)(12) of 40 CFR allows the State to omit or modify conditions to impose more stringent requirements. In accordance with 40 CFR section 123.25, this Order omits federal conditions that address enforcement authority specified in 40 CFR sections 122.41(j)(5) and (k)(2) because the enforcement authority under the Water Code is more stringent. In lieu of these conditions, this Order incorporates by reference Water Code section 13387(e).

# B. Special Provisions

# 1. Reopener Provisions

This Order may be re-opened and modified, revoked and reissued, or terminated for cause in accordance with the provisions of 40 CFR parts 122, 123, 124, and 125. The San Diego Water Board may reopen the permit to modify permit conditions and requirements. Causes for modification include, but are not limited to, revisions to effluent limitations, receiving water requirements, monitoring and reporting requirements; participation in the Southern California Coastal Water Research Project (SCCWRP) monitoring program or other regional or water body monitoring coalition as determined by the San Diego Water Board; or adoption of new or revised regulations, water quality control plans or policies by the State Water Board or the San Diego Water Board, including revisions to the Basin Plan or Ocean Plan.

- 2. Special Studies and Additional Monitoring Requirements Not Applicable
- 3. Best Management Practices and Pollution Prevention Not Applicable
- 4. Construction, Operation, and Maintenance Specifications
  - a. This Order carries over provisions from Order No. R9-2012-0006 to ensure the Facility is protected against the impact of storm events.
  - b. This Order adds a provision based on the requirements of 40 CFR section 122.41(e) to ensure the Facilities have adequate power.
- 5. Special Provisions for Publicly-Owned Treatment Works (POTWs)
- 6. Other Special Provisions Not Applicable
- 7. Compliance Schedules Not Applicable

### VII. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

CWA section 308 and 40 CFR sections 122.41(h), (j)-(l), 122.44(i), and 122.48 require that all NPDES permits specify monitoring and reporting requirements. Water Code sections 13267 and 13383 also authorize the San Diego Water Board to establish monitoring, inspection, entry, reporting, and recordkeeping requirements. The MRP (Attachment E) establishes monitoring, reporting, and recordkeeping requirements that implement State and federal requirements. The

following provides the rationale for the monitoring and reporting requirements contained in the MRP (Attachment E).

#### A. Core Monitoring Requirements

### Influent Monitoring – Not Applicable

## 2. Effluent Monitoring

Effluent monitoring is required to determine compliance with the conditions of this Order, to identify operational problems, to improve plant performance, and to conduct reasonable potential analyses for subsequent orders. Effluent monitoring also provides information on wastewater characteristics for use in interpreting water quality and biological data.

Continuous monitoring for flow and semiannual monitoring for temperature have been carried over from Order No. R9-2012-0006 to this Order.

This Order increases monitoring for total dissolved solids from semiannually to monthly to evaluate whether the dilution credit established in 2005 is still applicable and appropriate and to re-assess the dilution credit if the brine discharges from the Facility changes effluent quality discharged at Discharge Point No. 001.<sup>7</sup>

This Order increases the monitoring for pH, oil and grease, total suspended solids, settleable solids, and turbidity from semiannually to monthly to demonstrate if effluent limitations have been met.

This Order increases monitoring for the Ocean Plan Table 1 parameters from annually to semiannually to ensure a sufficient dataset for performing a more statistically-sound RPA for the reissuance of this Order.

For this Order, the Discharger may apply the performance goal for both chromium (VI) and chromium (III) as a total chromium performance goal. The Ocean Plan allows dischargers to meet the objective for chromium (VI) as a total chromium objective (footnote a, of Table 1 of the Ocean Plan). Total chromium includes both chromium (VI) and chromium (III) and the Clean Water Act has no analytical method for chromium (III) 8. Thus, this Order allows the Discharger to also meet the objective for chromium (III) as a total chromium objective. If the Discharger only monitors for total chromium to meet the requirements for both chromium (VI) and chromium (III), the total chromium data will be used to determine if reasonable potential exists for both chromium (VI) and chromium (III) in future permit reissuances and/or updates.

Refer to section III.B of the MRP (Attachment E).

### 3. Whole Effluent Toxicity Testing Requirements

This Order contains a chronic toxicity performance goal as described in section IV.C.5 of this Fact Sheet. This Order increase monitoring for chronic toxicity from annually to semiannually to ensure a sufficient dataset for performing a more statistically-sound RPA for the reissuance of this Order.

<sup>&</sup>lt;sup>7</sup> Order Nos. R9-2018-0003 and R9-2018-0002, Attachment E, section VI.B requires the San Elijo Joint Powers Authority and City of Escondido, respectively, to conduct a study to re-evaluate the minimum initial dilution factor (Dm) for SEOO established in 200.

<sup>&</sup>lt;sup>8</sup> In order to obtain a value for chromium (III), two separate methods must be used: one for total chromium determination and one for chromium (VI) determination. The value for chromium (III) is obtained by subtracting the chromium (VI) value from the total chromium value.

Consistent with the requirements of the Ocean Plan, section III.C.5 of the MRP (Attachment E) requires the Discharger to develop an Initial Investigation Toxicity Reduction Evaluation (TRE) Work Plan and submit the Initial Investigation TRE Work Plan within 90 days of the effective date of this Order. The Initial Investigation TRE Work Plan must describe steps the Discharger intends to follow if the performance goal for chronic toxicity is exceeded.

To determine if the discharge consistently exceeds the toxicity performance goal, this Order requires the Discharger to notify the San Diego Water Board and to accelerate toxicity testing if the performance goal for chronic toxicity is exceeded in any one test. If any of the additional tests demonstrate toxicity, consistent with section III.C.10 of the Ocean Plan, the Discharger is required to submit a Detailed TRE Work Plan in accordance with the its submitted Initial Investigation TRE Work Plan and USEPA guidance<sup>9</sup> which shall include: further steps taken by the Discharger to investigate, identify, and correct the causes of toxicity; actions the Discharger will take to mitigate the effects of the discharge and prevent the recurrence of toxicity; and a schedule for these actions. The Discharger must also implement a Toxicity Identification Evaluation (TIE), as necessary, based upon the magnitude and persistence of toxicity performance goal exceedances. Once the source of toxicity is identified, the Discharger must take all reasonable steps to reduce the toxicity to meet the chronic toxicity performance goal identified in section IV.A of this Order.

The above accelerated monitoring (a minimum of four succeeding tests performed at 14-day intervals) is based on the probability of encountering at least one toxicity exceedance assuming a true, but unknown level of occurrence.

Within 30 days of completion of the TRE, the Discharger must submit the results of the TRE, including a summary of the findings, data generated, a list of corrective actions taken or planned to achieve consistent compliance with the toxicity performance goal of this Order and prevent recurrence of exceedances of the performance goal, and a time schedule for implementation of any planned corrective actions. The Discharger must implement any planned corrective actions in the TRE Final Report in accordance with the specified time schedule, unless otherwise directed in writing by the San Diego Water Board. The corrective actions and time schedule must be modified at the direction of the San Diego Water Board.

Refer to section III.C of the MRP (Attachment E).

- 4. Land Discharge Monitoring Requirements Not Applicable
- 5. Recycling Monitoring Requirements Not Applicable

See (a) Generalized Methodology for Conducting Industrial Toxicity Reduction Evaluations (EPA/600/2-88/070, 1989); Toxicity Identification Evaluation, Phase I (EPA/600/6-91/005F); (c) Methods for Aquatic Toxicity Identification Evaluations, Phase II (EPA/600/R-92/080); (d) Methods for Aquatic Toxicity Identification Evaluations, Phase III (EPA/600/R-92/081); and (e) Marine Toxicity Identification Evaluation (TIE): Phase I Guidance Document (EPA/600/R-96-054,1996).

## B. Receiving Water Monitoring Requirements

The City of Escondido and San Elijo Joint Powers Authority conduct receiving water monitoring for their individual discharges to the San Elijo Ocean Outfall <sup>10</sup>. The receiving water monitoring is designed to measure the effects of the SEOO discharge on the receiving ocean waters, including effects on coastal water quality, seafloor sediments, and marine life. The receiving water monitoring data may be used, in conjunction with other pertinent technical information, to determine compliance with the receiving water limitations and other related provisions of this Order. The Discharger shall review the receiving water monitoring reports submitted by the City of Escondido and San Elijo Joint Powers Authority as they become available on the State Water Board website at <a href="http://ciwqs.waterboards.ca.gov/ciwqs/readOnly/PublicReportEsmrAtGlanceServlet?inCommand=reset">http://ciwqs.waterboards.ca.gov/ciwqs/readOnly/PublicReportEsmrAtGlanceServlet?inCommand=reset</a>.

### C. Regional Monitoring Requirements

Regional ocean water monitoring provides information about the sources, fates, and effects of anthropogenic contaminants in the coastal marine environment necessary to make assessments over large areas. The large-scale assessments provided by regional monitoring describe and evaluate cumulative effects of all anthropogenic inputs and enable better decision making regarding protection of beneficial uses of ocean waters. Regional monitoring data assists in the interpretation of core monitoring studies by providing a more accurate and complete characterization of reference conditions and natural variability. Regional monitoring also leads to methods standardization and improved quality control through inter-calibration exercise. The coalitions implementing regional monitoring enable sharing of technical resources, trained personnel, and associated costs. Focusing these resources on regional issues and developing a broader understanding of pollutants effects in ocean waters enables the development of more rapid and effective response strategies. Based on all of these considerations the San Diego Water Board supports regional approaches to monitoring ocean waters.

The Discharger is encouraged to participate with other regulated entities, other interested parties, and the San Diego Water Board in development and implementation of new and improved monitoring and assessment programs for ocean waters in the San Diego Region and discharges to those waters.

Refer to section V of the MRP (Attachment E).

## 1. Kelp Bed Canopy Monitoring Requirements

Kelp consists of a number of species of brown algae. Along the central and southern California coast, giant kelp (*Macrocystis pyrifera*) is the largest species colonizing rocky, and in some cases sandy, subtidal habitats. Giant kelp is an important component of coastal and island communities in southern California, providing food and habitat for numerous animals.

Discharges from the City of Escondido's MFRO Facility and HARRF are regulated by separate WDRs, Order No. R9-2018-0002, NPDES No. CA0107981, Waste Discharge Requirements for the City of Escondido, Hale Avenue Resource Recovery Facility and Membrane Filtration/Reverse Osmosis Facility Discharge to the Pacific Ocean through the San Elijo Ocean Outfall.

Discharges from the San Elijo Joint Powers Authority, San Elijo Water Reclamation Facility are regulated by separate WDRs, Order No. R9-2018-0003, NPDES No. CA0107999, Waste Discharge Requirements for the San Elijo Joint Powers Authority, San Elijo Water Reclamation Facility Discharge to the Pacific Ocean through the San Elijo Ocean Outfall.

The City of Escondido and San Elijo Joint Powers Authority participate, for their individual discharges to the San Elijo Ocean Outfall, in an ongoing regional survey of coastal kelp beds in the Southern California Bight. The intent of these surveys is to provide an indication of the health of these kelp beds, recognizing that the extent of kelp bed canopies may change due to variety of influences. Kelp bed canopy data obtained from the regional monitoring program may be used, in conjunction with other pertinent technical information, to determine compliance with the receiving water limitations and other related provisions of this Order. The Discharger shall review the findings and conclusions of each annual Status of the Kelp Beds Report as it becomes available on the Southern California Bight Regional Aerial Kelp Surveys website at http://kelp.sccwrp.org/reports.html.

Refer to section V.A of the MRP (Attachment E).

# 2. Southern California Bight Regional Monitoring Program Participation Requirements

The Southern California Bight (Bight), defined as the concave bend of the shoreline extending from Point Conception to Punta Colonet in Mexico, is host to unique, biologically diverse marine ecosystems that have long been vulnerable to the impacts of human activity. The coastal zone of the Bight hosts nearly 22 million U.S. residents that engage in a wide variety of industrial, military, and recreational activities. Approximately 5,600 miles of watersheds, half of which is highly developed, drain into the Bight. The Southern California Bight Regional Monitoring Program brings together researchers and water-quality managers to pool their resources and work together to investigate the condition of marine ecosystems both spatially and temporally, and extend greater protections to the Bight's diverse habitats and natural resources.

The Discharger may be requested by the San Diego Water Board to participate in the Southern California Bight Regional Monitoring Program coordinated by the SCCWRP, or any other coordinated regional monitoring effort named by the San Diego Water Board, pursuant to Water Code sections 13267 and 13383, and 40 CFR section 122.48. The intent of the Southern California Bight Regional Monitoring Program is to maximize the efforts of all monitoring partners using a more cost-effective monitoring design and to best utilize the pooled scientific resources of the Southern California Bight.

## D. Special Studies Requirements - Not Applicable

## E. Other Monitoring Requirements – Not Applicable

## VIII. PUBLIC PARTICIPATION

The San Diego Water Board has considered the issuance of WDRs that will serve as an NPDES permit for the Facility. As a step in the WDR adoption process, the San Diego Water Board staff has developed tentative WDRs and has encouraged public participation in the WDR adoption process by providing a period of a minimum of 30 days for public review and comment on the Tentative Order.

#### A. Notification of Interested Parties

The San Diego Water Board notified the Discharger and interested agencies and persons of its intent to prescribe WDRs for the discharge and provided an opportunity to submit written comments and recommendations. Notification was provided through in the North County Union Tribune on August 10, 2018. The Tentative Order was also posted on the San Diego Water Board website and emailed to the Discharger and all known interested parties on August 10, 2018.

The public also had access to the meeting agenda including all supporting documents and any changes in meeting dates and locations through the San Diego Water Board's website at: http://www.waterboards.ca.gov/sandiego/.

#### B. Written Comments

Interested persons were invited to submit written comments concerning tentative WDRs as provided through the notification process. Comments were due either in person or by mail to the Executive Office at the San Diego Water Board at 2375 Northside Drive, Suite 100, San Diego, CA 92108.

To be fully responded to by staff and considered by the San Diego Water Board, the written comments were due at the San Diego Water Board office by 5:00 p.m. on September 10, 2018.

# C. Public Hearing

The San Diego Water Board held a public hearing on the tentative WDRs during its regular Board meeting on the following date and time and at the following location:

Date: Wednesday, October 10, 2018

Time: 9:00 AM

Location: San Diego Water Board

Board Meeting Room

2375 Northside Drive, Suite 108 San Diego, California 92108

Interested persons were invited to attend. At the public hearing, the San Diego Water Board heard testimony, pertinent to the discharge, WDRs, and permit. For accuracy of the record, important testimony was requested in writing.

## D. Reconsideration of Waste Discharge Requirements

Any person aggrieved by this action of the San Diego Water Board may petition the State Water Board to review the action in accordance with Water Code section 13320 and CCR, title 23, sections 2050. The State Water Board must receive the petition by 5:00 p.m., within 30 calendar days of the date of adoption of this Order at the following address, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or State holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Petitions may be sent in as follows:

By mail: In Person:

State Water Resources Control Board State Water Resources Control Board

Office of Chief Counsel Office of Chief Counsel

P.O. Box 100, 1001 | Street 1001 | Street

Sacramento, CA 95812-0100 Sacramento, California 95814

By email: By fax:

waterqualitypetitions@waterboards.ca.gov (916) 341-5199

For instructions on how to file a petition for review, see:

http://www.waterboards.ca.gov/public notices/petitions/water quality/wgpetition instr.shtml

### E. Information and Copying

The ROWD, other supporting documents, and comments received are on file and may be inspected at the address above at any time between 8:30 a.m. and 4:45 p.m., Monday

through Friday. Copying of documents may be arranged through the San Diego Water Board by calling (619) 516-1990.

# F. Register of Interested Persons

Any person interested in being placed on the mailing list for information regarding the WDRs and NPDES permit should contact the San Diego Water Board, reference the Facility, and provide a name, address, and phone number.

#### G. Additional Information

Requests for additional information or questions regarding this Order should be directed to Joann Lim by email at <u>Joann.Lim@waterboards.ca.gov</u> or by phone at (619) 521-3362.

# ATTACHMENT G – DISCHARGE PROHIBITIONS CONTAINED IN THE OCEAN PLAN AND BASIN PLAN

## A. Ocean Plan Discharge Prohibitions

- 1. The Discharge of any radiological chemical, or biological warfare agent or high-level radioactive waste into the ocean is prohibited.
- 2. Waste shall not be discharged to designated Areas of Special Biological Significance except as provided in Chapter III.E. of the Ocean Plan.
- 3. Pipeline discharge of sludge to the ocean is prohibited by federal law; the discharge of municipal and industrial waste sludge directly to the ocean, or into a waste stream that discharges to the ocean, is prohibited. The discharge of sludge digester supernatant directly to the ocean, or to a waste stream that discharges to the ocean without further treatment, is prohibited.
- 4. It is the policy of the State Water Resources Control Board (State Water Board) that the treatment, use and disposal of sewage sludge shall be carried out in the manner found to have the least adverse impact on the total natural and human environment. Therefore, if federal law is amended to permit such discharge, which could affect California waters, the State Water Board may consider requests for exceptions to this section under Chapter III. J of this Plan, provided further that an Environmental Impact Report on the proposed project shows clearly that any available alternative disposal method will have a greater adverse environmental impact than the proposed project.
- 5. The by-passing of untreated wastes containing concentrations of pollutants in excess of those of Table 1 or Table 2 [of the Ocean Plan] is prohibited.
- 6. The discharge of Trash to surface waters of the State or the deposition of Trash where it may be discharged into surface waters of the State is prohibited. Compliance with this prohibition of discharge shall be achieved as follows:
  - a. Dischargers with NPDES permits that contain specific requirements for the control of Trash that are consistent with these Trash Provisions shall be determined to be in compliance with this prohibition if the dischargers are in full compliance with such requirements.
  - b. Dischargers with non-NPDES waste discharge requirements (WDRs) or waivers of WDRs that contain specific requirements for the control of Trash shall be determined to be in compliance with this prohibition if the dischargers are in full compliance with such requirements.
  - c. Dischargers with NPDES permits, WDRs, or waivers of WDRs that do not contain specific requirements for the control of Trash are exempt from these Trash Provisions.
  - d. Dischargers without NPDES permits, WDRs, or waivers of WDRs must comply with this prohibition of discharge.
  - e. Chapter III.I.6.b and Chapter III.L.3 notwithstanding, this prohibition of discharge applies to the discharge of preproduction plastic by manufacturers of preproduction plastics, transporters of preproduction plastics, and manufacturers that use preproduction plastics in the manufacture of other products to surface waters of the State, or the deposition of preproduction plastic where it may be discharged into

surface waters of the State, unless the discharger is subject to a NPDES permit for discharges of storm water associated with industrial activity.

# B. Basin Plan Discharge Prohibitions

- The discharge of waste to waters of the State in a manner causing, or threatening to cause a condition of pollution, contamination or nuisance as defined in Water Code section 13050, is prohibited.
- 2. The discharge of waste to land, except as authorized by WDRs of the terms described in Water Code section 13264 is prohibited.
- 3. The discharge of pollutants or dredged or fill material to waters of the U.S. except as authorized by an NPDES permit or a dredged or fill material permit (subject to the exemption described in Water Code section 13376) is prohibited.
- 4. Discharges of recycled water to lakes or reservoirs used for municipal water supply or to inland surface water tributaries thereto are prohibited, unless this San Diego Water Board issues an NPDES permit authorizing such a discharge; the proposed discharge has been approved by the State Water Board, Division of Drinking Water (DDW) and the operating agency of the impacted reservoir; and the discharger has an approved fail-safe long-term disposal alternative.
- 5. The discharge of waste to inland surface waters, except in cases where the quality of the discharge complies with applicable receiving water quality objectives, is prohibited. Allowances for dilution may be made at the discretion of the San Diego Water Board. Consideration would include streamflow data, the degree of treatment provided and safety measures to ensure reliability of facility performance. As an example, discharge of secondary effluent would probably be permitted if streamflow provided 100:1 dilution capability.
- 6. The discharge of waste in a manner causing flow, ponding, or surfacing on lands not owned or under the control of the discharger is prohibited, unless the discharge is authorized by the San Diego Water Board.
- 7. The dumping, deposition, or discharge of waste directly into waters of the State, or adjacent to such waters in any manner which may permit its being transported into the waters, is prohibited unless authorized by the San Diego Water Board.
- 8. Any discharge to a storm water conveyance system that is not composed entirely of storm water is prohibited unless authorized by the San Diego Water Board. [The federal regulations, 40 CFR section 122.26(b)(13), define storm water as storm water runoff, snow melt runoff, and surface runoff and drainage. 40 CFR section 122.26(b)(2) defines an illicit discharge as any discharge to a storm water conveyance system that is not composed entirely of storm water except discharges pursuant to an NPDES permit and discharges resulting from fire fighting activities.] [Section 122.26 amended at 56 FR 56553, November 5, 1991; 57 FR 11412, April 2, 1992].
- 9. The unauthorized discharge of treated or untreated sewage to waters of the State or to a storm water conveyance system is prohibited.
- The discharge of industrial wastes to conventional septic tank/ subsurface disposal systems, except as authorized by the terms described in Water Code section 13264, is prohibited.
- 11. The discharge of radioactive wastes amenable to alternative methods of disposal into the waters of the State is prohibited.

- 12. The discharge of any radiological, chemical, or biological warfare agent into waters of the State is prohibited.
- 13. The discharge of waste into a natural or excavated site below historic water levels is prohibited unless the discharge is authorized by the San Diego Water Board.
- 14. The discharge of sand, silt, clay, or other earthen materials from any activity, including land grading and construction, in quantities which cause deleterious bottom deposits, turbidity or discoloration in waters of the State or which unreasonably affect, or threaten to affect, beneficial uses of such waters is prohibited.
- 15. The discharge of treated or untreated sewage from vessels to Mission Bay, Oceanside Harbor, Dana Point Harbor, or other small boat harbors is prohibited.